

WHAT IS CLAIMED IS:

1. A pump, comprising:
 - a case having a hollow inside defined by an inner wall surface thereof and including a first through hole through which fluid is sucked in the hollow and a second through hole through which the fluid is ejected from the hollow;
 - a rotor that is rotatable in the hollow and having a rotary shaft and a through groove formed on the rotor in a direction across the rotary shaft; and
 - a partition supported in the through groove slidably in the direction across the rotary shaft, the partition being rotatable with the rotor with at least both ends of the partition, with respect to the direction across the rotary shaft, in constant contact with the inner wall surface defining the hollow upon rotation of the rotor, wherein the hollow is partitioned into a plurality of chambers each enclosed by the case, the rotor, and the partition member.
2. The pump of claim 1, wherein the rotor is rotatable and in constant or intermittent contact with a first position of the inner wall surface defining the hollow, and when the rotor is at least in contact with the first position of the inner wall surface, the first through hole and the second through hole are present in different chambers.
3. The pump of claim 1, further comprising:
 - a sliding member that is disposed on each side of the partition, wherein a sliding friction resistance between the sliding member and the through groove of the rotor is smaller than a sliding friction resistance between the through groove of the rotor and the partition.
4. The pump of claim 3, wherein a length of the sliding member is shorter than a length of the partition member with respect to the direction across the rotor.
5. The pump of claim 1, wherein when the first through hole and the second through hole are on a same side with respect to the partition, a fluid resistance between the first through hole and the second through hole is variable.
6. The pump of claim 5, wherein the fluid resistance is changed when the rotor is moved between a position making contact with a first position of the inner wall surface defining the hollow and a position where the rotor does not make contact with the first position.
7. The pump of claim 5, wherein the fluid resistance is changed when a part of the inner wall surface defining the hollow is moved between a position making contact with a first position of the inner wall surface defining the hollow and a position that does not make contact with the first position.

8. The pump of claim 5, wherein the rotor has a cut portion on an outer peripheral surface around the rotor and the rotor rotates in constant or intermittent contact with a first position of the inner wall surface defining the hollow, and the fluid resistance is changed in accordance with a position of the cut portion changing by rotating of the rotor with respect to the first through hole and the second through hole.

9. The pump of claim 5, wherein the rotor has a communication passage connecting two places on the outer peripheral surface and the rotor rotates in constant or intermittent contact with a first position of the inner wall surface defining the hollow, and the fluid resistance is changed in accordance with a position of the communication passage changing by rotating the rotor with respect to the first through hole and the second through hole.

10. The pump of claim 5, wherein the second through hole is formed on an upper vertical side of the case.

11. The pump of claim 1, wherein at least both ends of the partition flexibly deform to bend in a direction opposite to the rotational direction of the rotor in contact with the inner wall surface of the case and closely make contact with the inner wall surface of the case.

12. The pump of claim 11, wherein the partition is shaped thinner toward edge portions.

13. The pump of claim 11, wherein the partition has a first portion formed of a first material that allows the first portion to flexibly deform in contact with the case and a second portion formed of a second material that allows the second portion to deform less flexibly than the first portion, and a friction resistance between the first portion and the rotor is greater than a friction resistance between the second portion and the rotor.

14. The pump of claim 1, wherein a metal needle having a fluid passage inside is directly connected to the first through hole.

15. The pump of claim 1, wherein when the rotor is stopped at a rotational position when the pump is not in operation, the rotor has a passage that provides communication between the first through hole and the second through hole.

16. An inkjet printer comprising:
an inkjet head that ejects ink toward a recording medium;
an ink tank that contains ink for supplying the inkjet head;
a pump, comprising:

a case having a hollow inside defined by an inner wall surface thereof and including a first through hole through which fluid is sucked in the hollow and a second through hole through which the fluid is ejected from the hollow;

a rotor that is rotatable in the hollow and having a rotary shaft and a through groove formed on the rotor in a direction across the rotary shaft; and

a partition supported in the through groove slidably in the direction across the rotary shaft, the partition being rotatable with the rotor with at least both ends of the partition, with respect to the direction across the rotary shaft, in constant contact with the inner wall surface defining the hollow upon rotation of the rotor, wherein the pump is connected between the inkjet head and the ink tank, and the hollow is partitioned into a plurality of chambers each enclosed by the case, the rotor, and the partition member.

17. The inkjet printer of claim 16, wherein when the first through hole and the second through hole of the pump are on the same side with respect to the partition, a fluid resistance between the first through hole and the second through hole is variable in a first chamber where the first through hole and the second through hole are present out of two chambers that are formed in the hollow partitioned by the partition.

18. The inkjet printer of claim 16, wherein a metal needle having a fluid passage inside is directly connected to the first through hole and a tip of the needle is stuck in the ink tank.

19. The inkjet printer of claim 16, wherein an ink passage connecting the pump and the inkjet head is formed with a portion that is connected to the second through hole and faces toward a vertical direction, and a filter is disposed in the portion such that a filter face is placed horizontally.

20. The inkjet printer of claim 16, wherein the second through hole is formed on an upper vertical side of the case.

21. The inkjet printer of claim 16, wherein when the rotor is stopped at a rotational position when the pump is not in operation, the rotor has a passage that provides communication between the first through hole and the second through hole with the rotor stopped at the rotational position, and when ink is ejected from the inkjet head with the rotor stopped at the rotational position, ink is supplied from the ink tank via the passage to the inkjet head.

22. A pump, comprising:

a case having a hollow inside defined by an inner wall surface thereof and including a first through hole and a second through hole through which the fluid is ejected from the hollow;

a rotor that is rotatable in the hollow and having a rotary shaft and a through hole formed on the rotor in a direction across the rotary shaft; and

a partition supported in the through groove slidably in the direction across the rotary shaft, the partition being rotatable with the rotor with at least both ends of the partition member, with respect to the direction across the rotary shaft, in constant contact with the inner wall surface defining the hollow upon rotation of the rotor, wherein the rotor and the case are movable relative to each other such that the rotor and the case are in contact with each other at a first position and are separate at a second position.

23. A pump, comprising:

a case having a hollow inside defined by an inner wall surface thereof and including a first through hole through which fluid is sucked in the hollow and a second through hole through which the fluid is ejected from the hollow;

a rotor that is rotatable in the hollow and having a rotary shaft and a first through groove and a second through groove formed on the rotor in a direction across the rotary shaft;

a partition supported in the first through groove slidable in the direction across the rotary shaft, the partition being rotatable with the rotor with at least both ends of the partition member, with respect to the direction across the rotary shaft, in constant contact with the inner wall surface defining the hollow upon rotation of the rotor, wherein a first end of the second through groove is adjacent to the first through hole and a second end of the second through groove is adjacent to the second through hole when the rotor is not rotating.